

METHOD OF FABRICATING A FLOATING GATE

ABSTRACT OF THE INVENTION

A method of fabricating a floating gate for a semiconductor device is disclosed and provided.

5 According to this method, an undoped polycrystalline silicon layer is deposited on a tunnel oxide layer. The undoped polycrystalline silicon layer has a first thickness. Moreover, a doped polycrystalline silicon layer is deposited on the undoped polycrystalline silicon layer. The doped polycrystalline silicon layer has a second thickness. The undoped polycrystalline silicon layer and the doped polycrystalline silicon layer form the floating gate having a third thickness. In an embodiment,

10 the semiconductor device is a flash memory device.